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(54) Title: **MODIFIED ADSORBENT FOR DRY SCRUBBING AND USE THEREOF**

(57) Abstract: The present invention provides an amine functionalised adsorbent for use in dry scrubbing process. The adsorbent comprises amine functionalised mesoporous silica in which the amine groups are present at or near the surface of the silica, including within the pore walls and channels of the silica. The present invention further provides methods of preparing the adsorbent and of using the adsorbent for the adsorption of CO₂ and/or other acid gases.



WO 2004/054708 A2